Exhibit 300: Capital Asset Summary

Part I: Summary Information And Justification (All Capital Assets)

Section A: Overview & Summary Information

Date Investment First Submitted: 2009-06-30
Date of Last Change to Activities: 2012-08-16
Investment Auto Submission Date: 2012-02-28
Date of Last Investment Detail Update: 2012-06-29
Date of Last Exhibit 300A Update: 2012-06-29
Date of Last Revision: 2012-08-16

Agency: 006 - Department of Commerce **Bureau:** 48 - National Oceanic and Atmospheric Administration

Investment Part Code: 01

Investment Category: 00 - Agency Investments

1. Name of this Investment: NOAA/NESDIS/ NPP Data Exploitation (NDE)

2. Unique Investment Identifier (UII): 006-000321100

Section B: Investment Detail

1. **Provide a brief summary of the investment, including a brief description of the related benefit to the mission delivery and management support areas, and the primary beneficiary(ies) of the investment. Include an explanation of any dependencies between this investment and other investments.**

The NPP Data Exploitation (NDE) project will develop, implement, and test key data processing and distribution systems within NOAA/NESDIS to deliver enhanced environmental observations to NOAA Operational Centers and other civilian customers. The NPP satellite was launched on October 28, 2011. NDE ensures that there is no gap in providing data to weather models and to local emergency responders. NDE will reduce the transmission time of new environmental observations to applications at NOAA Operational Centers. It now takes 2-3 years to transition new satellite observations to operational users such as the National Weather Service (NWS) and the National Ocean Service (NOS). NDE will reduce the transition time to one year and will enable NOAA Operational Centers to assimilate at least three new observations annually. New IT equipment is required to process the large datasets of the new NPP satellite for NOAA and other civilian users. These data include measurements of the atmosphere used in numerical weather prediction and surface phenomena used for climate analysis and hazard warnings. NDE includes software that adds value to NPP observation. This software includes new science algorithms and product tailoring to generate enhanced products for NOAA users. In FY11, NDE procured hardware and software for the NDE production environment and developed software to be used by NOAA to process and distribute data. In FY12, NDE is conducting interface testing with the NPP satellite ground system and end users. NDE completed 3 out of 5 software Builds and

will develop code for the last two software Builds: user services/registration, and monitoring and reporting. NDE will train OSPO staff to monitor the NDE production environment on a 24X7 basis and plans to transition the Production Environment to OSPO operations in mid FY13. In FY14, NDE will initiate the implementation of a remote backup system. By FY15, the NDE remote backup system will be fully implemented to meet FIPS 199 requirements for high impact systems.

2. **How does this investment close in part or in whole any identified performance gap in support of the mission delivery and management support areas? Include an assessment of the program impact if this investment isn't fully funded.**

The NPP satellite and the NDE system fill the Polar data availability gap between the Polar Operational Environmental Satellites (POES) now in orbit and the future JPSS satellite. If the NDE system is not fully funded, then data from the NPP satellite will not be downloaded and processed, and the capabilities of the instruments on the NPP satellite will not available to the stakeholders.

3. **Provide a list of this investment's accomplishments in the prior year (PY), including projects or useful components/project segments completed, new functionality added, or operational efficiency achieved.**

NDE's accomplishments during FY11 include: - Regular briefings and meetings with the NESDIS Systems Administrator, the NOAA Program Management Council, and the Program Oversight Board (POB). These exchanges ensure NOAA management is apprised of NDE status and future development. - NDE PM Jim Silva met monthly with NWS representatives to review NWS's NPP product requirements and prepare NDE to NWS ground segment interface testing prior to launch. NDE also coordinated interface testing with CLASS, OSPO Satellite Data Analysis Branch, and EUMETSAT. - Completed documentation of Level 1 Requirements Definition Document, NDE to ESPC Transition to Operations Plan, and Systems Integration Test Plans with various end users. - Successful completion of system performance testing with sample data products. - Successful completion of all ground system interface testing including with NPP Ground System.

4. **Provide a list of planned accomplishments for current year (CY) and budget year (BY).**

A. Planned accomplishments for the current year (CY = FY2012) are: 1. Conduct and complete interface testing with CLASS and EUMETSAT. 2. Continue development and testing of Build 4 software before final transition to ESPC. 3. Development of the NDE Operations Handbook for ESPC staff. 4. Integrate NDE software and hardware for the Production Environment. 5. Develop training modules for ESPC Facilitators. 6. Develop, test and deliver pre-operational products into the NDE Test Environment. 7. Develop, test and integrate Phase I products into the Test Environment. 8. Develop, test and integrate Phase 2 products into the Production Environment. B. Planned accomplishments for the budget year (BY = FY2013) are: 1. Integrate the first and second NDE production environments in December 2012. 2. Transition the two NDE production environments to NESDIS operations in April 2013. 3. Deliver the second set of NPP operational products to NWS and the first set to National Ocean Service in July 2013.

5. **Provide the date of the Charter establishing the required Integrated Program Team (IPT) for this investment. An IPT must always include, but is not limited to: a qualified fully-dedicated IT program manager, a contract specialist, an information technology specialist, a security specialist and a business process owner before OMB will approve this program investment budget. IT Program Manager, Business Process Owner and Contract Specialist must be Government Employees.**

2010-07-30

Section C: Summary of Funding (Budget Authority for Capital Assets)

1.

Table I.C.1 Summary of Funding

	PY-1 & Prior	PY 2011	CY 2012	BY 2013
Planning Costs:	$9.9	$0.4	$0.4	$0.4
DME (Excluding Planning) Costs:	$8.4	$4.1	$4.1	$4.1
DME (Including Planning) Govt. FTEs:	$0.0	$0.0	$0.0	$0.0
Sub-Total DME (Including Govt. FTE):	$18.3	$4.5	$4.5	$4.5
O & M Costs:	$0.0	$0.0	$0.0	$0.0
O & M Govt. FTEs:	$0.0	$0.0	$0.0	$0.0
Sub-Total O & M Costs (Including Govt. FTE):	0	0	0	0
Total Cost (Including Govt. FTE):	$18.3	$4.5	$4.5	$4.5
Total Govt. FTE costs:	0	0	0	0
# of FTE rep by costs:	0	0	0	0
Total change from prior year final President's Budget ($)		$4.5	$4.5	
Total change from prior year final President's Budget (%)		0.00%	0.00%	

2. If the funding levels have changed from the FY 2012 President's Budget request for PY or CY, briefly explain those changes:

Two factors changed NDE funding: 1. In the BY11 OMB Exhibit 300 the schedule and timing of funding for NDE subtasks was impacted by changes in the JPSS schedule. 2. After discussion with NOAA and DOC OCIOs, required payments for NESDIS HQ support were included in the NDE Cost and Schedule Performance Table and described as a baseline subtask. The BY11 OMB 300 has some changes to FY06, FY08, FY12, and FY13 to identify and describe past and expected future payments to NESDIS HQ.

Section D: Acquisition/Contract Strategy (All Capital Assets)

Table I.D.1 Contracts and Acquisition Strategy

Contract Type	EVM Required	Contracting Agency ID	Procurement Instrument Identifier (PIID)	Indefinite Delivery Vehicle (IDV) Reference ID	IDV Agency ID	Solicitation ID	Ultimate Contract Value ($M)	Type	PBSA ?	Effective Date	Actual or Expected End Date
Awarded	1330	DOCR1BK13090030									

2. If earned value is not required or will not be a contract requirement for any of the contracts or task orders above, explain why:

Exhibit 300B: Performance Measurement Report

Section A: General Information

Date of Last Change to Activities: 2012-08-16

Section B: Project Execution Data

Table II.B.1 Projects

Project ID	Project Name	Project Description	Project Start Date	Project Completion Date	Project Lifecycle Cost ($M)
3211D12001	Prepare NDE System for transitioning to OSPO.	Conduct and complete interface testing with EUMETSAT and conduct interface testing with CLASS. Develop NDE Operations Handbook for ESPC staff. Continue development and testing of Build 4 software before final transition to ESPC.			
3211D12002	Prepare NDE Production Environment for integration into OSPO.	Complete the integration of the NDE Production Environment. Develop training modules for system administrators, network administrators and Science Product Area Leaders (PAL).			
3211D12003	Deliver Phase 1 Mission Continuity Products from NPP	Deliver and integrate science algorithms into the NDE system Test Environment and the Production Environment.			
3211D12004	Provide NESDIS HQ support	Each NESDIS investment pays a fee (one annual payment) to NESDIS HQ for support services provided by the NESDIS HQ offices such as contracting and acquisition office, badge processing and security, OCIO,			

Table II.B.1 Projects

Project ID	Project Name	Project Description	Project Start Date	Project Completion Date	Project Lifecycle Cost ($M)
		and OCFO.			

Activity Summary

Roll-up of Information Provided in Lowest Level Child Activities

Project ID	Name	Total Cost of Project Activities ($M)	End Point Schedule Variance (in days)	End Point Schedule Variance (%)	Cost Variance ($M)	Cost Variance (%)	Total Planned Cost ($M)	Count of Activities
3211D12001	Prepare NDE System for transitioning to OSPO.							
3211D12002	Prepare NDE Production Environment for integration into OSPO.							
3211D12003	Deliver Phase 1 Mission Continuity Products from NPP							
3211D12004	Provide NESDIS HQ support							

Key Deliverables

Project Name	Activity Name	Description	Planned Completion Date	Projected Completion Date	Actual Completion Date	Duration (in days)	Schedule Variance (in days)	Schedule Variance (%)
3211D12004	Payment for NESDIS HQ support	Make annual single payment to NESDIS HQ to support other NESDIS priorities.	2012-03-15	2012-03-15	2012-02-09	1	35	3,500.00%
3211D12002	Develop training modules for ESPC Facillitators	Develop training modules for system administrators, network engineers and Science Product Area Leaders (PAL).	2012-04-30	2012-04-30	2012-05-11	181	-11	-6.08%
3211D12003	Develop, test and deliver pre-operational	Develop, test, integrate and deliver	2012-04-30	2012-04-30	2012-01-31	181	90	49.72%

Key Deliverables								
Project Name	Activity Name	Description	Planned Completion Date	Projected Completion Date	Actual Completion Date	Duration (in days)	Schedule Variance (in days)	Schedule Variance (%)
	products	pre-operational products into the NDE Test Environment.						
3211D12003	Develop and test Phase I products	Develop, test and integrate Phase I products into the NDE Test Environment.	2012-05-14	2012-05-14	2012-05-15	120	-1	-0.83%
3211D12001	Development of NDE Operations Handbook for ESPC staff.	Develop NDE Operations Handbook for ESPC staff to operate the NDE Production Environment.	2012-07-31	2012-07-31	2012-07-20	121	11	9.09%
3211D12003	Develop and test Phase 2 products	Develop, test and integrate Phase 2 products into the NDE Production Environment.	2012-09-14	2012-09-14		122	0	0.00%

Section C: Operational Data

Table II.C.1 Performance Metrics

Metric Description	Unit of Measure	FEA Performance Measurement Category Mapping	Measurement Condition	Baseline	Target for PY	Actual for PY	Target for CY	Reporting Frequency
NONE								